

BIOGRAPHICAL SKETCH

NAME: David James Thomas

POSITION TITLE: Research Toxicologist

EDUCATION/TRAINING

Institution	Degree	Year	Field of Study
Trinity College, Duke University	B.S.	1972	Zoology
University of Rochester School of Medicine and Dentistry	Ph.D.	1978	Toxicology
Department of Neurology, University of North Carolina School of Medicine	PDF	1977-1978	
Department of Pathology, University of North Carolina School of Medicine	PDF	1978-1980	

PROFESSIONAL EXPERIENCE:

1980-1986 Assistant Laboratory Director, Lead Poisoning Clinic, The Kennedy Institute, Baltimore, Maryland
1980-1984 Research Associate, Department of Environmental Health Sciences, School of Hygiene and Public Health, Johns Hopkins University
1882-1986 Research Associate, Environmental Sciences, The Kennedy Institute
1984-1986 Assistant Professor, Department of Pediatrics, School of Medicine, Johns Hopkins University
1986-1991 Assistant Professor, Department of Pediatrics, University of Nebraska Medical Center
1991-Present Research Toxicologist, Pharmacokinetics Branch, Experimental Toxicology Division, National Health and Environmental Effects Research Laboratory

PROFESSIONAL SOCIETIES:

Society of Toxicology
American Society for Biochemistry and Molecular Biology

SELECTED AWARDS AND HONORS:

U. S. EPA Science and Technology Achievement Award - Level III - 1996
U. S. EPA Science and Technology Achievement Award - Honorable Mention - 1999

INVITED LECTURES/SYMPOSIA (1998 to present):

Speaker, Department of Toxicology Graduate Seminar Series, North Carolina State University, 1998, Raleigh, NC; Speaker, Third International Conference on the Health Effects of Arsenic, 1998, San Diego; Speaker, Fourth International Conference on the Health Effects of Arsenic, 2000, San Diego; Speaker, Department of Nutrition, School of Public Health, University of North Carolina at Chapel Hill, 2001, Chapel Hill, NC; Speaker and Session Organizer, Meeting of International Society of Exposure Assessment, 2001, Charleston, SC; Speaker, Arsenic in New England Conference, 2002, Manchester, NH; Speaker, Fifth International Conference on the Health Effects of Arsenic, 2002, San Diego; Speaker, Sixth International Society for Trace Element Research in Humans Conference, 2002, Quebec City, Quebec, Canada; Speaker, Joint United States-Chile Conference on Toxicogenomics, 2002, Santiago, Chile; Speaker, United States-Japan Conference on Arsenic in Biology and Medicine, 2002, Honolulu
Speaker, Laboratory of Pharmacology, National Institute of Environmental Health Sciences, 2003, Research Triangle Park, NC

ASSISTANCE/LEADERSHIP PROVIDED TO THE SCIENTIFIC COMMUNITY (1998 to present):

Member, American Water Works Association Research Foundation Professional Advisory Committee on the Genotoxicity of Arsenic in Genetically-Modified Mice, 1997-1999; Councilor, Metals Speciality Section - Society of Toxicology, 1998-2000; Member, External Research Advisory Committee, Superfund Research Center, Nelson Institute of Environmental Medicine, New York University, 2002-; Member, Editorial Board, Toxicology and Applied Pharmacology, 2002 -

ASSISTANCE/LEADERSHIP PROVIDED TO THE AGENCY:

Speaker, US EPA National Health and Environmental Effects Research Laboratory Open House, 1999, Research Triangle Park, NC; Speaker, Federal State Toxicology and Risk Analysis Committee meeting, 2000, Research Triangle Park, NC; Principal, Preparation of Section on Arsenic for Drinking Water Implementation Plan, 2000-; Member, Synergy Committee, 1999-2001

PUBLICATIONS (From January 1, 1998 to present, 18 out of a total of 69 publications):

1. Calderon, R.L., Hudgens, E., Le, X.C., Schreinemachers, D., and Thomas, D.J.: Excretion of arsenic in urine as a function of exposure to arsenic in drinking water. *Environ. Health Perspect.* 107:663-667, 1999.
2. Styblo, M., Del Razo, L.M., LeCluyse, E.L., Hamilton, G.A., Wang, C., Cullen, W.R., and Thomas, D.J.: Metabolism of arsenic in primary cultures of human and rat hepatocytes. *Chem. Res. Toxicol.* 12:560-565, 1999.
3. Lin, S., Cullen, W.R., and Thomas, D.J.: Methylarsenicals and arsinothiols are potent inhibitors of mouse liver thioredoxin reductase. *Chem. Res. Toxicol.* 12:924-930, 1999.
4. Hughes, M.F., Kenyon, E.M., Edwards, B.C., Mitchell, C.T., and Thomas, D.J.: Strain-dependent disposition of inorganic arsenic in the mouse. *Toxicology* 137:95-108, 1999.
5. Styblo, M., Vega, L., Germolec, D.R., Luster, M.I., Del Razo, L.M., Wang, C., Cullen, W.R., and Thomas, D.J.: Metabolism and toxicity of arsenicals in cultured cells. *In Arsenic Exposure and Health Effects*, ed. by W.R. Chappell, C.O. Abernathy, and R.L. Calderon, pp. 311-323, Elsevier, Amsterdam, 1999.
6. Styblo, M., Del Razo, L.M., Vega, L., Germolec, D.R., LeCluyse, E.L., Hamilton, G.A., Wang, C., Cullen, W.R., and Thomas, D.J.: Comparative toxicity of trivalent and pentavalent inorganic and methylated arsenicals in human cells. *Arch. Toxicol.* 74:289-299, 2000.
7. Styblo, M., and Thomas, D.J.: Selenium modifies the metabolism and toxicity of arsenic in primary rat hepatocytes. *Toxicol. Appl. Pharmacol.* 172:52-61, 2001.
8. Lin, S., Del Razo, L.M., Styblo, M., Wang, C., Cullen, W.R., and Thomas, D.J.: Arsenicals inhibit thioredoxin reductase in cultured rat hepatocytes. *Chem. Res. Toxicol.* 14:305-311, 2001.
9. Mass, M.J., Tennant, A., Roop, B.C., Cullen, W.R., Styblo, M., Thomas, D.J., and Kligerman, A.D.: Methylated trivalent arsenic species may be the proximate or ultimate genotoxic forms of arsenic. *Chem. Res. Toxicol.* 14:355 - 361, 2001.
10. Del Razo, L.M., Styblo, M., Cullen, W.R., and Thomas, D.J.: Determination of trivalent methylated arsenicals in biological matrices. *Toxicol. Appl. Pharmacol.* 174:282-293, 2001.
11. Thomas, D.J., Styblo, M., and Lin, S.: The cellular metabolism and systemic toxicity of arsenic. *Toxicol. Appl. Pharmacol.* 176:127-144, 2001.
12. Thomas, D.J., and Styblo, M.: Selenium. *In Clinical Environmental Health and Toxic Exposures*, Second Edition, eds. by J.B. Sullivan, Jr. and G.R. Kreiger, pp. 943-949, Lippincott Williams and Wilkins, Philadelphia, 2001.
13. Styblo, M., Lin, S., Del Razo, L.M., and Thomas, D.J.: Trivalent methylated arsenicals: Toxic products of the metabolism of inorganic arsenic. *In Arsenic Exposure and Health Effects IV*, ed. by W.R. Chappell, C.O. Abernathy, and R.L. Calderon, pp. 325-337, Elsevier, Amsterdam, 2001.
14. Thomas, D.J., Del Razo, L.M., Schreinemachers, D.M., Hudgens, E.E., Le, X.C., and Calderon, R.L.: Dose-response relationships for the metabolism and urinary excretion of arsenicals in humans. *In Arsenic Exposure and Health Effects IV*, ed. by W.R. Chappell, C.O. Abernathy, and R.L. Calderon, pp. 353-365, Elsevier, Amsterdam, 2001.
15. Lin, S., Shi, Q., Nix, F.B., Styblo, M., Beck, M.A., Herbin-Davis, K.M., Hall, L.L., Simeonsson, J.B., and Thomas, D.J.: A novel S-adenosyl-L-methionine: arsenic(III) methyltransferase from rat liver cytosol. *J. Biol. Chem.* 277:10795-10803, 2002.
16. Simeonsson, J.B., Elwood, S.A., Ezer, M., Pacquette, H.L., Swart, D.J., Beach, H.D., and Thomas, D.J.: Development of ultratrace analytical techniques for arsenic measurements. *Talanta* 58:189-199, 2002.
17. Styblo, M., Drobná, Z., Jaspers, I., Lin, S., and Thomas, D.J.: The role of biomethylation in toxicity and carcinogenicity of arsenic. A research update. *Environ. Health Perspect.* 110 (Supplement 5):767-771, 2002.
18. Drobná, Z., Jaspers, I., Thomas, D.J. and Styblo, M.: Differential activation of AP-1 in human bladder epithelial cells by inorganic and methylated arsenicals. *FASEB Journal* 17:67-69, 2003.